Amendm nts to the Claims

Claims 1-40 (Cancelled).

41. (New) A method of forming a dielectric material comprising:

depositing a silicon oxide layer;

after depositing the silicon oxide layer, introducing nitrogen into an upper portion of the silicon oxide layer to form a nitrogen-comprising region by exposing the silicon oxide layer to an a plasma comprising an activated nitrogen species;

after introducing nitrogen, bonding at least some of the nitrogen to silicon within the nitrogen-comprising region; and

forming a layer of silicon nitride over the silicon oxide

42. (New) The method of claim 41 wherein the silicon oxide layer has a thickness of at least 10 Angstroms.

43. (New) The method of claim 41 wherein the nitrogen-comprising region has a thickness of less than or equal to about 5 Angstroms.

44. (New) The method of claim 41 further comprising generating the plasma from one or more of N_2, NH_3 and N_2O.

45. (New) The method of claim 41 wherein the silicon oxide layer is maintained at a temperature of less than or equal to about 200°C during the exposing.

46. (New) A method of forming a composite gate dielectric material comprising:

depositing a layer of silicon oxide-comprising material;

after the depositing, introducing nitrogen into the layer of silicon oxide-comprising material utilizing a nitrogen-comprising plasma treatment which introduces a greater amount of nitrogen into a first portion of the silicon oxide-comprising material relative to a second portion of the silicon-comprising material;

after introducing nitrogen, annealing the silicon oxide-comprising material; and

patterning the silicon oxide-comprising material.

47. (New) The method of claim 46 wherein the silicon oxide-comprising material comprises silicon dioxide.

48. (New) The method of claim 46 wherein the first portion of the silicon oxide-comprising material has a thickness of less than or equal to about 5 Angstroms.

49. (New) The method of claim 46 further comprising depositing a silicon nitride layer on the silicon oxide layer.

50. (New) The method of claim 46 wherein the layer of silicon-oxide material has a thickness of less than or equal to about 5 Angstroms.

51. (New) The method of claim 50 wherein the first portion has a thickness of less than or equal to about 2 Angstroms.

52. (New) The method of claim 46 wherein after the introducing nitrogen the second portion of the layer of silicon oxide material is substantially nitrogen free.

53. (New) A method of processing a semiconductor substrate, comprising:

providing a semiconductor substrate;

depositing a layer of silicon dioxide over the substrate;

within a reaction chamber, exposing the substrate to a nitrogen-comprising plasma to introduce nitrogen into the layer of silicon dioxide, a greater amount of nitrogen being incorporated into an upper portion of the silicon dioxide layer than into a lower portion of the silicon dioxide layer;

after the exposing to the nitrogen-comprising plasma, depositing a silicon nitride layer over the layer of silicon dioxide;

forming a conductive layer over the silicon nitride layer; and

patterning the silicon dioxide layer, the silicon nitride layer and the conductive layer to form a gate structure.

54. (New) The method of clam 53 further comprising performing an anneal after the exposing to the nitrogen plasma, wherein the anneal bonds at least some of the incorporated nitrogen to silicon within the silicon dioxide layer.

55. (New) The method of claim 53 wherein the exposing to the nitrogen-comprising plasma results in the upper portion having a nitrogen content of at least 5%.

56. (New) The method of claim 53 wherein the upper portion of the silicon dioxide layer has a thickness of less than or equal to about 5 Angstroms.

57. (New) The method of claim 53 wherein the lower portion of the silicon dioxide layer remains substantially free of nitrogen after the exposing.